

By



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BLACKWELL SANDERS PEPER MARTIN LLP			PARSLEY, DAVID J	
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SUITE 2400			PAPER NUMBER	
ST. LOUIS, MO 63101			3643	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/604,306

Applicant(s)

JOHNSON, JOHN E.

Examiner

David J. Parsley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **Detailed Action**

### ***Amendment***

1. This office action is in response to applicant's amendment dated 5-3-05 and this action is non-final.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the high-pressure nozzle located within a vacuum casing as seen in claims 14-17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Further, the worm feed line must be shown as seen in claims 9-13 must be shown or the feature(s) canceled from the claim(s). It is unclear to whether the worm feed line is shown in drawings 5 and 5a-5b. If it is then a reference numeral should be used to point it out in the drawings and then have a corresponding description in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cutting bit in combination with the spiral cutting head on the feed pull chain as seen in claim 7 and the cutting bit in combination with the high pressure nozzle as seen in claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because reference numeral 502 in figure 5 appears to be pointing to the animal carcass and not to the wire feed drive as described in paragraph [0041] in applicant’s specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

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3. The disclosure is objected to because of the following informalities: there are no reference numerals corresponding to drawing figures in relation to the high-pressure nozzle.

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claim 7, applicant claims two different embodiments being the cutting bit embodiment and the pull chain embodiment in combination but does not describe in the specification if these embodiments are combinable or how these embodiments are combinable.

Referring to claim 8, applicant claims two different embodiments being the cutting bit embodiment and the high-pressure nozzle embodiment in combination but does not describe in the specification if these embodiments are combinable or how these embodiments are combinable.

Claims 9-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not



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described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation of “a semi-flexible worm feed line” as seen in line 6 of claim 9 and in line 4 of claim 12 is not described in the specification.

Claims 8 and 14-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation of retracting the nozzle within the vacuum casing and extending the nozzle beyond the casing as seen in lines 9-10 of claim 8, in lines 9-10 of claim 14 and in lines 9-10 in claim 17 is not described in the specification.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 18 is rejected under 35 U.S.C. 102(a) as being anticipated by JP Patent No. 2002-

176907. The Japanese patent discloses an apparatus for removing spinal cord material from a carcass of an animal comprising, an elongated hollow flexible tube – at 21, forming a vacuum casing – see the English abstract, open on a leading end – see for example figures 2a1-2c2, a

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substantially hollow cutting blade implement – at 22 or 23 or 24, having an open leading blade end – see proximate 22a or 23a or 24a in figures 2a1-2c2, the leading blade end having a sharpened circumferential leading edge – see at 22 or 23 or 24 in figures 2a1-2c2, about the opening, the cutting blade having a distal open blade base end fixedly attached to the leading end opening of the leading end of the tubing about and extending from the rim of the opening of the tubing – see at 22 or 23 or 24 in figures 2a1-2c2, operable to allow the tube and blade to rotate together and for engaging and breaking down a spinal cord material sufficient for vacuuming through the hollow tube – see for example figures 1-2 and the English abstract where the device is manually operated as seen in figure 1 and thus the tube and the blade which is directly and fixedly attached to the tube are capable of being rotated together by the user of the device to remove the spinal cord material.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE

Patent No. 19757745 in view of U.S. Patent No. 5,167,568 to Esbroeck et al.

Referring to claims 1 and 6, the German patent discloses an apparatus for removing spinal cord material from a carcass of an animal comprising, an elongated flexible tube – at 9,



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forming a vacuum casing – see figure 1, a flexible rotatable shaft – at 7,8,12, extending through the tube and captured therein – see figure 1, and a cutting bit – at 1,2, attached to a tip end of the shaft – see figure 1, and extending from the tube operable for engaging and breaking down a spinal cord material sufficient for vacuuming – see for example figures 1-2 and the English abstract. The German patent further discloses the rotatable shaft – at 7,8,12, extends through the vacuum casing extending the cutting bit – at 1,2, beyond the vacuum casing – see for example figure 1. The German patent does not disclose the rotatable shaft is adapted to retract the cutting bit in the vacuum casing and extend the cutting bit forward of the vacuum casing. Esbroeck et al. does disclose the rotatable shaft – at 6, is adapted to retract the bit – at 46, into the vacuum casing – at 44 and extend the bit – at 46 forward of the casing – see for example figures 5-6. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the German patent and add the rotatable shaft of Esbroeck et al., so as to allow for the rotatable shaft to be automatically controlled.

Referring to claim 3, the German patent as modified by Esbroeck et al. further discloses the cutting bit is a drill style bit – see for example figures 1-2 of the German patent.

Referring to claim 4, the German patent as modified by Esbroeck et al. further discloses the elongated flexible tube – at 9, is in communication with a vacuum source – see for example figures 1-2 and the English abstract of the German patent.

Referring to claim 5, the German patent as modified by Esbroeck et al. further discloses the rotatable shaft is operably attached to a rotation drive for effecting rotation of the shaft and bit – see for example figures 1-2 and the English abstract of the German patent.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the German patent as modified by Esbroeck et al. as applied to claim 1 above, and further in view of U.S. Patent No. 1,900,267 to Youman. The German patent as modified by Esbroeck et al. does not disclose the cutting bit is an auger style bit. Youman does disclose the cutting bit is an auger style bit – at 15-19. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the German patent and add the cutting bit being an auger style bit of Esbroeck et al., so as to allow for the device to be movable into the tissue of the animal carcass during cutting.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the German patent as modified by Esbroeck et al. as applied to claim 6 above, and further in view of U.S. Patent No. 6,126,535 to Post. The German patent as modified by Esbroeck et al. does not disclose inserting a feed line through the spinal canal of an animal carcass where the feed line has a pull chain attached to a trailing edge of the feed line, and pulling the feed line and pull chain attached thereto through the spinal channel where the pull chain has linkages of spiral spring cutting head implements. Post does disclose inserting a feed line – at 13, through the spinal canal of an animal carcass where the feed line has a pull chain – at 14-23, attached to a trailing edge of the feed line, and pulling the feed line and pull chain attached thereto through the spinal channel where the pull chain has linkages of spiral spring cutting head implements – proximate 15 and/or 18 – see for example figure 2A. Therefore it would have been obvious to one of ordinary skill in the art to take the method of the German patent as modified by Esbroeck et al. and add the feed line and pull chain of Post, so as to allow for proper gripping of the spine of the animal carcass.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the German patent '745 as modified by Esbroeck et al. as applied to claim 6 above, and further in view of DE Patent

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No. 19824966. German patent '745 as modified by Esbroeck et al. further discloses inserting an elongated tube vacuum casing – at 9, through the spinal channel – see figure 1 of the German patent '745, of a carcass, where the elongated flexible tube has a flexible high pressure tubing – at 11 and/or 16, extending therethrough and a high pressure nozzle – at 3,4, in fluid communication with the high pressure tubing – see figure 1 of the German patent '745, and attached to one end of the high pressure tubing – see figure 1 of the German patent '745, the high pressure tubing for engaging and disengaging a spinal cord in the spinal channel – see for example figure 1 of the German patent '745. The German patent '745 as modified by Esbroeck et al. further discloses retracting in and extending through the vacuum casing – see at 46 in figures 5-6 of Esbroeck et al. The German patent '745 as modified by Esbroeck et al. does not disclose the nozzle emits a high pressure jet spray at a pressure sufficient to break down spinal cord material for vacuuming out and applying a vacuum to the flexible tube vacuum casing for extracting the spinal cord material. German patent '966 does disclose the nozzle – at 3,4, emits a high pressure jet spray at a pressure sufficient to break down spinal cord material for vacuuming out and applying a vacuum to the flexible tube vacuum casing for extracting the spinal cord material – see for example figures 1-3 and the English abstract. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the German patent '745 as modified by Esbroeck et al. and add the jet spray of German patent '966, so as to allow for removal of the spinal cord from the animal carcass without chipping or damaging the bones of the spine.

Claims 9-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,126,535 to Post in view of U.S. Patent No. 4,149,544 to Baraut.

Referring to claims 9 and 12, Post discloses an apparatus for removing spinal cord material from a carcass of an animal comprising, a pull chain – at 14-23, having linkages of spiral spring cutting head implements – proximate 15 and 18, and a worm feed line – at 13, attached to an end of the chain for insertion through the spinal canal and pulling the pull chain through – see for example figure 2A. Post does not disclose the spiral spring varies in diameter along its length thereby having differing diameter springed cutting edges. Baraut does disclose the spiral spring – at 2-4, varies in diameter – see figure 1, where the bulge – at 3 increases the diameter at a portion of the spring element, along its length thereby having differing diameter springed cutting edges – see for example figure 1. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Post and add the springed cutting element of Baraut, so as to allow for the cutting implement to be biased into differing cutting orientations.

Referring to claim 10, Post as modified by Baraut further discloses the pull chain has linkages of spiral spring cutting head implements with differing diameter cutting edges – see for example at items 2-4 in figure 1 of Baraut.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Post as modified by Baraut as applied to claims 9 or 11 above, and further in view of U.S. Patent No. 4,608,732 to Hill et al. Post as modified by Baraut further discloses a line drive for pulling the feed line and chain through the canal – see for example figure 2A of Post. Post as modified by Baraut does not disclose a sanitization system having high-pressure spray nozzles proximately disposed to the pull chain after it exits the carcass operable to spray sanitizer solution on the pull chain for sanitizing and removing debris. Hill et al. does disclose a sanitization system having high-pressure spray nozzles – at 60, proximately disposed to the pull chain after it exits the

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carcass operable to spray sanitizer solution on the pull chain for sanitizing and removing debris – see for example figure 1. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Post as modified by Baraut and add the sanitization system of Hill et al., so as to allow for the mechanical components of the device to be clean from any contaminants to prolong the active life of the device.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE Patent No. 19824966 in view of Esbroeck et al.

Referring to claims 14 and 17, the German patent '966 discloses an apparatus/method for removing spinal cord material from a carcass of an animal comprising, an elongated flexible tube – at 0, forming a vacuum casing and a flexible high-pressure tubing – at 2,5, extending through the elongated flexible tube and captured therein for channeling and delivering fluid under pressure to a high pressure nozzle – at 3,4, for emitting a jet spray of fluid sufficient to break down a spinal cord material for vacuuming through the elongated flexible tube – at 5, where the flexible high pressure tubing is adapted to extend through the vacuum casing for engaging and disengaging the spinal cord with the jet spray – see for example figures 1-4 and the English abstract. The German patent '966 does not disclose the flexible high-pressure tubing is adapted to retract in the vacuum casing and extend out of the casing. Esbroeck et al. does disclose the flexible high pressure tubing – at 46, is adapted to retract in the vacuum casing – at 44 and extend out of the casing – at 44 – see for example figures 5-6. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the German patent and add the retractable element of Esbroeck et al., so as to allow for the device to be automatically controlled.

Referring to claim 15, the German patent '966 as modified by Esbroeck et al. further discloses a vacuum source – see for example figure 2, in communication with the elongated flexible tube forming a vacuum – see for example figures 1-3 and the English abstract of the German patent.

Referring to claim 16, the German patent '966 as modified by Esbroeck et al. further discloses a high pressure fluid source – see figure 2, in fluid communication with the high pressure tubing – see for example figures 1-4 and the English abstract of the German patent.

### *Response to Arguments*

7. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890. The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Parsley  
Patent Examiner  
Art Unit 3643



**PETER M. POON**  
**SUPERVISORY PATENT EXAMINER**

8/17/05